

WO 03/089932

SEQUENCE LISTING

<110> Queensland University of Technology (all states other than U.S.)
Clements, Judith A (U.S. only)

<120> Condition-specific molecules and uses therefor

<130> 12176212/VPA

<140> Unassigned

<141> 2003-04-22

<150> AU PS1870/02

<151> 2002-04-22

<160> 43

<170> PatentIn version 3.2

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<211> 1603

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<221> CDS

<222> (38)..(577)

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ttc ctc acc ctg tcc gtg acg tgg att ggt gct gca ccc ctc atc ctg 103
Phe Leu Thr Leu Ser Val Thr Trp Ile Gly Ala Ala Pro Leu Ile Leu
10 15 20

tct cgg att gtg gga ggc tgg gag tgc gag aag cat tcc caa ccc tgg 151
Ser Arg Ile Val Gly Gly Trp Glu Cys Glu Lys His Ser Gln Pro Trp
25 30 35

cag gtg ctt gtg gcc tct cgt ggc agg gca gtc tgc ggc ggt gtt ctg 199
Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val Cys Gly Gly Val Leu
40 45 50

gtg cac ccc cag tgg gtc ctc aca gct gcc cac tgc atc agg aac aaa 247
Val His Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Asn Lys
55 60 65 70

agc gtg atc ttg ctg ggt cgg cac agc ctg ttt cat cct gaa gac aca 295
Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe His Pro Glu Asp Thr
75 80 85

ggc cag gta ttt cag gtc agc cac agc ttc cca cac ccg ctc tac gat 343
Gly Gln Val Phe Gln Val Ser His Ser Phe Pro His Pro Leu Tyr Asp
90 95 100

atg agc ctc ctg aag aat cga ttc ctc agg cca ggt gat gac tcc agc 391
Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser

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| cac gac ctc atg ctg ctc cgc ctg tca gag cct gcc gag ctc acg gat | | | 439 |
| His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Glu Leu Thr Asp | | | |
| 120 | 125 | 130 | |
| gct gtg aag gtc atg gac ctg ccc acc cag gag cca gca ctg ggg acc | | | 487 |
| Ala Val Lys Val Met Asp Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr | | | |
| 135 | 140 | 145 | 150 |
| acc tgc tac gcc tca ggc tgg ggc agc att gaa cca gag gag tgt acg | | | 535 |
| Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Cys Thr | | | |
| 155 | 160 | 165 | |
| cct ggg cca gat ggt gca gcc ggg agc cca gat gcc tgg gtc | | | 577 |
| Pro Gly Pro Asp Gly Ala Ala Gly Ser Pro Asp Ala Trp Val | | | |
| 170 | 175 | 180 | |
| tgagggagga ggggacagga ctccctgggtc tgagggagga gggccaagga accaggtggg | | | 637 |
| gtccagccca caacagtgtt tttgcctggc ccgtagtctt gaccccaaag aaacttcagt | | | 697 |
| gtgtggacct ccatgttatt tccaatgacg tgtgtgcgca agttcaccct cagaaggtga | | | 757 |
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| tgctggacac tgtccatgaa gcactgagca gaaagctgga ggcacaacgc accagacact | | | 1357 |
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| gagaaggctg tgagccaagg agggagggtc ttcctttggc atgggatggg gatgaagtaa | | | 1477 |
| ggagaggggac tggacccccct ggaagctgat tcactatggg gggagggtgta ttgaagtcc | | | 1537 |
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35 40 45

Val Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala
50 55 60

His Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu
65 70 75 80

Phe His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe
85 90 95

Pro His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg
100 105 110

Pro Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu
115 120 125

Pro Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln
130 135 140

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Asp Ala Trp Val
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 His Ser Gln Pro Trp Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val
 20 25 30
 tgc ggc ggt gtt ctg gtg cac ccc cag tgg gtc ctc aca gct gcc cac 144
 Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His
 35 40 45
 tgc atc agg aac aaa agc gtg atc ttg ctg ggt cgg cac agc ctg ttt 192
 Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe
 50 55 60
 cat cct gaa gac aca ggc cag gta ttt cag gtc agc cac agc ttc cca 240
 His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe Pro
 65 70 75 80
 cac ccg ctc tac gat atg agc ctc ctg aag aat cga ttc ctc agg cca 288
 His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro
 85 90 95
 ggt gat gac tcc agc cac gac ctc atg ctg ctc cgc ctg tca gag cct 336
 Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
 100 105 110
 gcc gag ctc acg gat gct gtg aag gtc atg gac ctg ccc acc cag gag 384
 Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln Glu
 115 120 125
 cca gca ctg ggg acc acc tgc tac gcc tca ggc tgg ggc agc att gaa 432
 Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
 130 135 140
 cca gag gag tgt acg cct ggg cca gat ggt gca gcc ggg agc cca gat 480
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 gcc tgg gtc tga 492
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 Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His
 35 40 45

Cys Ile Arg Asn Lys Ser Val Ile Leu Leu Gly Arg His Ser Leu Phe
50 55 60

His Pro Glu Asp Thr Gly Gln Val Phe Gln Val Ser His Ser Phe Pro
65 70 75 80

His Pro Leu Tyr Asp Met Ser Leu Leu Lys Asn Arg Phe Leu Arg Pro
85 90 95

Gly Asp Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
100 105 110

Ala Glu Leu Thr Asp Ala Val Lys Val Met Asp Leu Pro Thr Gln Glu
115 120 125

Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
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Ala Trp Val

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ctt gtg gcc tct cgt ggc agg gca gtc tgc ggc ggt gtt ctg gtg cac 96
Leu Val Ala Ser Arg Gly Arg Ala Val Cys Gly Gly Val Leu Val His
20 25 30
ccc cag tgg gtc ctc aca gct gcc cac tgc atc agg aac aaa agc gtg 144
Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Asn Lys Ser Val
35 40 45
atc ttg ctg ggt cgg cac agc ctg ttt cat cct gaa gac aca ggc cag 192
Ile Leu Leu Gly Arg His Ser Leu Phe His Pro Glu Asp Thr Gly Gln
50 55 60

gta ttt cag gtc agc cac agc ttc cca cac ccg ctc tac gat atg agc 240
 Val Phe Gln Val Ser His Ser Phe Pro His Pro Leu Tyr Asp Met Ser
 65 70 75 80

ctc ctg aag aat cga ttc ctc agg cca ggt gat gac tcc agc cac gac 288
 Leu Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser His Asp
 85 90 95

ctc atg ctg ctc cgc ctg tca gag cct gcc gag ctc acg gat gct gtg 336
 Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Glu Leu Thr Asp Ala Val
 100 105 110

aag gtc atg gac ctg ccc acc cag gag cca gca ctg ggg acc acc tgc 384
 Lys Val Met Asp Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys
 115 120 125

tac gcc tca ggc tgg ggc agc att gaa cca gag gag tgt acg cct ggg 432
 Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Cys Thr Pro Gly
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cca gat ggt gca gcc ggg agc cca gat gcc tgg gtc tga 471
 Pro Asp Gly Ala Ala Gly Ser Pro Asp Ala Trp Val
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Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Asn Lys Ser Val
 35 40 45

Ile Leu Leu Gly Arg His Ser Leu Phe His Pro Glu Asp Thr Gly Gln
 50 55 60

Val Phe Gln Val Ser His Ser Phe Pro His Pro Leu Tyr Asp Met Ser
 65 70 75 80

Leu Leu Lys Asn Arg Phe Leu Arg Pro Gly Asp Asp Ser Ser His Asp
 85 90 95

Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Glu Leu Thr Asp Ala Val
 100 105 110

Lys Val Met Asp Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys

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 Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Cys Thr Pro Gly
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 Pro Asp Gly Ala Ala Gly Ser Pro Asp Ala Trp Val
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ggg tgc act ggt gcc gtg ccc ctc atc cag tct cgg att gtg gga ggc      100
Gly Cys Thr Gly Ala Val Pro Leu Ile Gln Ser Arg Ile Val Gly Gly
              15              20              25

tgg gag tgt gag aag cat tcc caa ccc tgg cag gtg gct gtg tac agt      148
Trp Glu Cys Glu Lys His Ser Gln Pro Trp Gln Val Ala Val Tyr Ser
              30              35              40

cat gga tgg gca cac tgt ggg ggt gtc ctg gtg cac ccc cag tgg gtg      196
His Gly Trp Ala His Cys Gly Gly Val Leu Val His Pro Gln Trp Val
              45              50              55              60

ctc aca gct gcc cat tgc cta aag aag aat agc cag gtc tgg ctg ggt      244
Leu Thr Ala Ala His Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly
              65              70              75

cgg cac aac ctg ttt gag cct gaa gac aca ggc cag agg gtc cct gtc      292
Arg His Asn Leu Phe Glu Pro Glu Asp Thr Gly Gln Arg Val Pro Val
              80              85              90

agc cac agc ttc cca cac ccg ctc tac aat atg agc ctt ctg aag cat      340
Ser His Ser Phe Pro His Pro Leu Tyr Asn Met Ser Leu Leu Lys His
              95              100              105

caa agc ctt aga cca gat gaa gac tcc agc cat gac ctc atg ctg ctc      388
Gln Ser Leu Arg Pro Asp Glu Asp Ser Ser His Asp Leu Met Leu Leu
              110              115              120

cgc ctg tca gag cct gcc aag atc aca gat gtt gtg aag gtc ctg ggc      436
Arg Leu Ser Glu Pro Ala Lys Ile Thr Asp Val Val Lys Val Leu Gly
              125              130              135              140

ctg ccc acc cag gag cca gca ctg ggg acc acc tgc tac gcc tca ggc      484
Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly
              145              150              155

tgg ggc agc atc gaa cca gag gag ttc ttg cgc ccc agg agt ctt cag      532
Trp Gly Ser Ile Glu Pro Glu Glu Phe Leu Arg Pro Arg Ser Leu Gln
              160              165              170

tgt gtg agc ctc cat ctc ctg tcc aat gac atg tgt gct aga gct tac      580
Cys Val Ser Leu His Leu Leu Ser Asn Asp Met Cys Ala Arg Ala Tyr
              175              180              185

tct gag aag gtg aca gag ttc atg ttg tgt gct ggg ctc tgg aca ggt      628
Ser Glu Lys Val Thr Glu Phe Met Leu Cys Ala Gly Leu Trp Thr Gly
              190              195              200

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ggt aaa gac act tgt ggg gtg agt cat ccc tac tcc caa cat ctg gag 676
 Gly Lys Asp Thr Cys Gly Val Ser His Pro Tyr Ser Gln His Leu Glu
 205 210 215 220

ggg aaa ggg tgattctggg ggtccacttg tctgtaatgg tgtgcttcaa 725
 Gly Lys Gly

ggtatcacat catggggccc tgagccatgt gccctgcctg aaaagcctgc tgtgtacacc 785

aagggtggtgc attaccggaa gtggatcaag gacaccatcg cagccaaccc ctgagtggcc 845

ctgtcccacc cctacctcta gtaaatttaa gtccacctca cgttctggca tcaattggcc 905

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Ala Val Pro Leu Ile Gln Ser Arg Ile Val Gly Gly Trp Glu Cys Glu
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Lys His Ser Gln Pro Trp Gln Val Ala Val Tyr Ser His Gly Trp Ala
 35 40 45

His Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala
 50 55 60

His Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly Arg His Asn Leu

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| gtg ccc ctc atc cag tct cgg att gtg gga ggc tgg gag tgt gag aag | | | | | | | | | | | | | | | | | | 48 |
| Val Pro Leu Ile Gln Ser Arg Ile Val Gly Gly Trp Glu Cys Glu Lys | | | | | | | | | | | | | | | | | | |
| 1 | | | | 5 | | | | | 10 | | | | | | 15 | | | |
| | | | | | | | | | | | | | | | | | | |
| cat tcc caa ccc tgg cag gtg gct gtg tac agt cat gga tgg gca cac | | | | | | | | | | | | | | | | | | 96 |
| His Ser Gln Pro Trp Gln Val Ala Val Tyr Ser His Gly Trp Ala His | | | | | | | | | | | | | | | | | | |
| | | | 20 | | | | | 25 | | | | | | 30 | | | | |
| | | | | | | | | | | | | | | | | | | |
| tgt ggg ggt gtc ctg gtg cac ccc cag tgg gtg ctc aca gct gcc cat | | | | | | | | | | | | | | | | | | 144 |
| Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His | | | | | | | | | | | | | | | | | | |
| | | 35 | | | | | 40 | | | | | 45 | | | | | | |

tgc cta aag aag aat agc cag gtc tgg ctg ggt cgg cac aac ctg ttt 192
 Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly Arg His Asn Leu Phe
 50 55 60
 gag cct gaa gac aca ggc cag agg gtc cct gtc agc cac agc ttc cca 240
 Glu Pro Glu Asp Thr Gly Gln Arg Val Pro Val Ser His Ser Phe Pro
 65 70 75 80
 cac ccg ctc tac aat atg agc ctt ctg aag cat caa agc ctt aga cca 288
 His Pro Leu Tyr Asn Met Ser Leu Leu Lys His Gln Ser Leu Arg Pro
 85 90 95
 gat gaa gac tcc agc cat gac ctc atg ctg ctc cgc ctg tca gag cct 336
 Asp Glu Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
 100 105 110
 gcc aag atc aca gat gtt gtg aag gtc ctg ggc ctg ccc acc cag gag 384
 Ala Lys Ile Thr Asp Val Val Lys Val Leu Gly Leu Pro Thr Gln Glu
 115 120 125
 cca gca ctg ggg acc acc tgc tac gcc tca ggc tgg ggc agc atc gaa 432
 Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
 130 135 140
 cca gag gag ttc ttg cgc ccc agg agt ctt cag tgt gtg agc ctc cat 480
 Pro Glu Glu Phe Leu Arg Pro Arg Ser Leu Gln Cys Val Ser Leu His
 145 150 155 160
 ctc ctg tcc aat gac atg tgt gct aga gct tac tct gag aag gtg aca 528
 Leu Leu Ser Asn Asp Met Cys Ala Arg Ala Tyr Ser Glu Lys Val Thr
 165 170 175
 gag ttc atg ttg tgt gct ggg ctc tgg aca ggt ggt aaa gac act tgt 576
 Glu Phe Met Leu Cys Ala Gly Leu Trp Thr Gly Gly Lys Asp Thr Cys
 180 185 190
 ggg gtg agt cat ccc tac tcc caa cat ctg gag ggg aaa ggg tga 621
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Cys Gly Gly Val Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His
 35 40 45

Cys Leu Lys Lys Asn Ser Gln Val Trp Leu Gly Arg His Asn Leu Phe
 50 55 60

Glu Pro Glu Asp Thr Gly Gln Arg Val Pro Val Ser His Ser Phe Pro
 65 70 75 80

His Pro Leu Tyr Asn Met Ser Leu Leu Lys His Gln Ser Leu Arg Pro
 85 90 95

Asp Glu Asp Ser Ser His Asp Leu Met Leu Leu Arg Leu Ser Glu Pro
 100 105 110

Ala Lys Ile Thr Asp Val Val Lys Val Leu Gly Leu Pro Thr Gln Glu
 115 120 125

Pro Ala Leu Gly Thr Thr Cys Tyr Ala Ser Gly Trp Gly Ser Ile Glu
 130 135 140

Pro Glu Glu Phe Leu Arg Pro Arg Ser Leu Gln Cys Val Ser Leu His
 145 150 155 160

Leu Leu Ser Asn Asp Met Cys Ala Arg Ala Tyr Ser Glu Lys Val Thr
 165 170 175

Glu Phe Met Leu Cys Ala Gly Leu Trp Thr Gly Gly Lys Asp Thr Cys
 180 185 190

Gly Val Ser His Pro Tyr Ser Gln His Leu Glu Gly Lys Gly
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 gct gtg tac agt cat gga tgg gca cac tgt ggg ggt gtc ctg gtg cac 96
 Ala Val Tyr Ser His Gly Trp Ala His Cys Gly Gly Val Leu Val His
 20 25 30
 ccc cag tgg gtg ctc aca gct gcc cat tgc cta aag aag aat agc cag 144
 Pro Gln Trp Val Leu Thr Ala Ala His Cys Leu Lys Lys Asn Ser Gln

| 35 | | | | | | | | | | 40 | | | | | 45 | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| gtc | tgg | ctg | ggt | cgg | cac | aac | ctg | ttt | gag | cct | gaa | gac | aca | ggc | cag | 192 | | | | |
| Val | Trp | Leu | Gly | Arg | His | Asn | Leu | Phe | Glu | Pro | Glu | Asp | Thr | Gly | Gln | | | | | |
| 50 | | | | | 55 | | | | | 60 | | | | | | | | | | |
| agg | gtc | cct | gtc | agc | cac | agc | ttc | cca | cac | ccg | ctc | tac | aat | atg | agc | 240 | | | | |
| Arg | Val | Pro | Val | Ser | His | Ser | Phe | Pro | His | Pro | Leu | Tyr | Asn | Met | Ser | | | | | |
| 65 | | | | | 70 | | | | | 75 | | | | | 80 | | | | | |
| ctt | ctg | aag | cat | caa | agc | ctt | aga | cca | gat | gaa | gac | tcc | agc | cat | gac | 288 | | | | |
| Leu | Leu | Lys | His | Gln | Ser | Leu | Arg | Pro | Asp | Glu | Asp | Ser | Ser | His | Asp | | | | | |
| 85 | | | | | 90 | | | | | 95 | | | | | | | | | | |
| ctc | atg | ctg | ctc | cgc | ctg | tca | gag | cct | gcc | aag | atc | aca | gat | gtt | gtg | 336 | | | | |
| Leu | Met | Leu | Leu | Arg | Leu | Ser | Glu | Pro | Ala | Lys | Ile | Thr | Asp | Val | Val | | | | | |
| 100 | | | | | 105 | | | | | 110 | | | | | | | | | | |
| aag | gtc | ctg | ggc | ctg | ccc | acc | cag | gag | cca | gca | ctg | ggg | acc | acc | tgc | 384 | | | | |
| Lys | Val | Leu | Gly | Leu | Pro | Thr | Gln | Glu | Pro | Ala | Leu | Gly | Thr | Thr | Cys | | | | | |
| 115 | | | | | 120 | | | | | 125 | | | | | | | | | | |
| tac | gcc | tca | ggc | tgg | ggc | agc | atc | gaa | cca | gag | gag | ttc | ttg | cgc | ccc | 432 | | | | |
| Tyr | Ala | Ser | Gly | Trp | Gly | Ser | Ile | Glu | Pro | Glu | Glu | Phe | Leu | Arg | Pro | | | | | |
| 130 | | | | | 135 | | | | | 140 | | | | | | | | | | |
| agg | agt | ctt | cag | tgt | gtg | agc | ctc | cat | ctc | ctg | tcc | aat | gac | atg | tgt | 480 | | | | |
| Arg | Ser | Leu | Gln | Cys | Val | Ser | Leu | His | Leu | Leu | Ser | Asn | Asp | Met | Cys | | | | | |
| 145 | | | | | 150 | | | | | 155 | | | | | 160 | | | | | |
| gct | aga | gct | tac | tct | gag | aag | gtg | aca | gag | ttc | atg | ttg | tgt | gct | ggg | 528 | | | | |
| Ala | Arg | Ala | Tyr | Ser | Glu | Lys | Val | Thr | Glu | Phe | Met | Leu | Cys | Ala | Gly | | | | | |
| 165 | | | | | 170 | | | | | 175 | | | | | | | | | | |
| ctc | tgg | aca | ggt | ggt | aaa | gac | act | tgt | ggg | gtg | agt | cat | ccc | tac | tcc | 576 | | | | |
| Leu | Trp | Thr | Gly | Gly | Lys | Asp | Thr | Cys | Gly | Val | Ser | His | Pro | Tyr | Ser | | | | | |
| 180 | | | | | 185 | | | | | 190 | | | | | | | | | | |
| caa | cat | ctg | gag | ggg | aaa | ggg | tga | | | | | | | | | 600 | | | | |
| Gln | His | Leu | Glu | Gly | Lys | Gly | | | | | | | | | | | | | | |
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Ala Val Tyr Ser His Gly Trp Ala His Cys Gly Gly Val Leu Val His
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Pro Gln Trp Val Leu Thr Ala Ala His Cys Leu Lys Lys Asn Ser Gln
 35 40 45

Val Trp Leu Gly Arg His Asn Leu Phe Glu Pro Glu Asp Thr Gly Gln
 50 55 60

Arg Val Pro Val Ser His Ser Phe Pro His Pro Leu Tyr Asn Met Ser
 65 70 75 80

Leu Leu Lys His Gln Ser Leu Arg Pro Asp Glu Asp Ser Ser His Asp
 85 90 95

Leu Met Leu Leu Arg Leu Ser Glu Pro Ala Lys Ile Thr Asp Val Val
 100 105 110

Lys Val Leu Gly Leu Pro Thr Gln Glu Pro Ala Leu Gly Thr Thr Cys
 115 120 125

Tyr Ala Ser Gly Trp Gly Ser Ile Glu Pro Glu Glu Phe Leu Arg Pro
 130 135 140

Arg Ser Leu Gln Cys Val Ser Leu His Leu Leu Ser Asn Asp Met Cys
 145 150 155 160

Ala Arg Ala Tyr Ser Glu Lys Val Thr Glu Phe Met Leu Cys Ala Gly
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Leu Trp Thr Gly Gly Lys Asp Thr Cys Gly Val Ser His Pro Tyr Ser
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Gln His Leu Glu Gly Lys Gly
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21

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21

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<400> 42

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21

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<400> 43

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21